

REQUEST FOR PROPOSAL

To: ALL BIDDERS

CTBTO Ref. No.: 2025-0154/SANZ 
(PLEASE QUOTE ON ALL COMMUNICATIONS)

Tel. No.: +43 (1) 26030-6350

E-mail: procurement@ctbto.org

Date: 21 November 2025

Subject: Software application for the visualisation, processing, and classification of initial overflight data

Deadline for Submission: 2 December 25

Vienna Local Time: 17:00

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (hereinafter referred to as the 'Commission') hereby invites you to submit a proposal that meets the requirements of the attached documents.

You are kindly requested to complete and return the acknowledgement form by email as soon as possible.

If you have any questions you should contact the email address indicated above.

Yours Sincerely,



Selma Bukvic
Senior Procurement Officer, Unit Head
Procurement Services Section

ACKNOWLEDGEMENT FORM

Solicitation No: 2025-0154

Title: Software application for the visualisation, processing, and
classification of initial overflight data

Closing Date: 2 December 25

Vienna Local Time: 17:00

Procurement Staff: Eileen Sanz

CTBTO Req. No.: 0010027740

Please complete 'A' or 'B' or 'C'
and Return

WITHIN FIVE (5) DAYS

THE PREPARATORY COMMISSION FOR THE
COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION (CTBTO)

by email to
procurement@ctbto.org

A: We shall submit our proposal

By: _____
(date)

Company Name: _____

Contact Name: _____

Email/Tel: _____

B: We may submit and will advise

By: _____
(date)

Company Name: _____

Contact Name: _____

Email/Tel: _____

C: We will not submit a proposal for the following reason(s)

- ___ our current workload does not permit us to take on additional work at this time;
- ___ we do not have the required expertise for this specific project;
- ___ insufficient time to prepare a proper submission;
- ___ other (please specify) _____

Company Name: _____

Contact Name: _____

Email/Tel: _____

INSTRUCTIONS FOR PREPARATION AND SUBMISSION OF PROPOSALS

1. General

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (the “Commission”) with its headquarters in Vienna is the International Organization mandated to establish the global verification system foreseen under the Comprehensive Nuclear-Test-Ban Treaty (CTBT), which is the Treaty banning any nuclear weapon test explosion or any other nuclear explosions. The Treaty provides for a global verification regime, including a network of 321 stations worldwide, a communication system, an International Data Centre and on-site inspections to monitor compliance with the Treaty.

This Request for Proposal (RFP) is for the provision of services namely, ***Software application for the visualisation, processing, and classification of initial overflight data*** as described in the attached Terms of Reference.

The Proposal shall meet all requirements stated in the Terms of Reference. For this project, the Commission is seeking capabilities, which will ensure that the tasks are accomplished expeditiously and at a reasonable cost.

2. Documents included in this RFP

This RFP consists of the following documents:

- 1) Letter of Invitation;
- 2) These Instructions for Preparation and Submission of Proposals
 - Attachment 1: Minimum Content of Technical Proposal and Technical Compliance Matrix;
 - Attachment 2: Evaluation Criteria and Method; and
 - Attachment 3: Price Schedule Form
- 3) List of CTBT State Signatories available at <http://www.ctbto.org> under [Status of Signatures and Ratifications | CTBTO](#) and incorporated hereby by reference;
- 4) Vendor Profile Form;
- 5) Statement of Confirmation;
- 6) The Commission’s Model Contract and its Annexes A-C:
 - The Commission’s License Agreement (Annex A] if required
 - The Commission’s General Conditions of Contract (Annex B) found at the following link and incorporated hereby by reference [CTBTO General Conditions of Contract](#)
 - The Commission’s Terms of Reference (Annex C) **including Annex 1 -sample dataset- which will be sent by link to the interested bidders upon receipt of the acknowledgement form.**

Note: In the event of award, the Proposal will be incorporated as Annex D to the Contract.

3. Amendment of RFP Documents

At any time prior to the closing date for submission of Proposal, the Commission may, for any reason, modify the RFP documents by amendment. The Commission may consider extending the deadline in order to allow adequate time for considering the modifications in the preparation of the Proposal.

4. Language of the Proposal

The Proposal and all correspondence and documents relating to it shall be in English.

5. Format and Submission of the Proposal

The Proposal shall be typed, dated and signed by an official legally authorized to enter into contracts on behalf of your organization. The Proposal shall not contain any interlineation, erasures or overwriting except as necessary to correct errors, in which case such corrections shall be initialled by the authorized person(s) signing the Proposal.

- (a) The Proposal shall be submitted electronically in **three separate pdf files**, one containing a Financial Proposal *with* prices, one containing a Financial Proposal *without* prices, and one containing a Technical Proposal.

No pricing/financial information shall be included in the Technical Section of the Bid. Note however that a complete list of the items being offered (without the prices) shall be included in the Technical Section of the Bid.

- (b) The Proposal shall be submitted to procurement@ctbto.org. The subject of the email shall contain the following: *RFP 2025-0154/SANZ Software application for the visualisation, processing, and classification of initial overflight data.*

6. Closing Date and Time

The Proposal shall be received by the above-mentioned addressee not later than the closing date and time indicated in the Letter of Invitation.

7. Request for Clarifications and Contacting the Commission

The Commission will issue clarifications, if required. Bidders are requested to e-mail any questions pertaining to this RFP as soon as possible after receipt of the solicitation documents, but in any case no later than **seven (7)** business days prior to the Closing Date. No requests for clarifications will be entertained after this time. Questions will only be accepted via e-mail and should be sent to:

E-mail: procurement@ctbto.org
Subject: RFP 2025-0154/SANZ - Request for Clarifications

The Commission will make all reasonable efforts to issue the clarifications not later than five (5) business days prior to the Closing Date.

Except in case of responding to a RFP clarification, no bidder shall contact the Commission on any matter relating to the Proposal after its submission and until the award of the Contract. Any attempt to influence the Commission in its evaluation of the Proposal or the contract award decision may result in the rejection of the Proposal.

8. Eligible Goods and Services

The goods and services (if any) to be rendered under the Contract/Purchase Order shall have their origin in the States Signatories of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) which is available in the CTBTO website at www.ctbto.org under [Status of Signatures and Ratifications | CTBTO](#). For purposes of this paragraph, "the origin" means the place from where the materials, goods and/or from which the services are supplied.

9. Type of Contract and Payment

The Commission intends to conclude a firm fixed price based on the attached Model Contract. The terms and conditions of payment for services are described in the attached Model Contract.

10. Preparation of the Proposal

The Proposal shall contain, but not necessarily be limited to, the information described below.

The Proposal shall be composed of the following separate parts:

- I. Technical Proposal;** and
- II. Financial Proposal;**

providing, but not limited to, the following information:

PART I: TECHNICAL PROPOSAL

Please state the reference number and the date of this RFP in the Proposal and any correspondence relating to it.

The Proposal shall contain, at the minimum:

- (i) The information required in **Attachment 1, Part I (Minimum Content of the Technical Proposal)**; and
- (ii) The complete **Attachment 1, Part II “Technical Compliance Matrix”**, which shall be submitted it as part of the Technical Proposal.

1. Point of Contact

The Proposal shall state the contact details and address (name, telephone number and e-mail address) of the person/point of contact in your company dealing with this RFP.

2. Documents Establishing the Eligibility and Qualifications of the Bidder

- (i) The Bidder shall furnish documentary evidence of its status as an eligible and qualified vendor. In order to award the Contract to a Bidder, its qualifications must be documented to the Commission’s satisfaction. These include, but are not limited, to the following:
 - (a) That the Bidder has the financial, technical, and production capability necessary to perform the Contract.
 - (b) That the Bidder assures and confirms to the Commission that the personnel being nominated are available to fulfil the demands of the Contract during its stated full term.

- (ii) Expertise of the Firm/Organization: This section shall provide a brief information on the experience of the organization, both domestic and international, which are related or similar in nature to the requirements of the RFP.

3. Bidder's Statement, Statement of Confirmation and Vendor Profile Form

The attached Bidder's Statement, Statement of Confirmation and Vendor Profile Form shall be duly filled-in, signed and submitted together with the Proposal.

4. Description of the Services

An explanation of the Bidder's understanding of the services to be provided and an overall preliminary operational plan for the execution of the services. At the minimum, the Proposal shall include the elements required in **Attachment 1** and shall include the Technical Compliance Matrix duly filled in.

5. Contractor's and Key Personnel Qualifications

As per Attachment 1 - Documentary evidence of the Bidder's and the project key personnel's qualifications meeting the requirements of the Terms of Reference, which shall establish to the Commission's satisfaction that the Bidder has technical capability necessary to perform the Contract and other necessary ongoing services as required. Curriculum vitae of key staff proposed for this contract, including technical experience to perform the Work.

6. Commission's Inputs

A description of the expected inputs/resources to be made available by the Commission and at what stage of the services.

7. Sub-Contractors

The Proposal shall include names, legal status, address and qualifications of subcontractor(s), if any, involved in the Project and the scope of the subcontracted services. The Bidder shall provide a statement that its organization shall be fully responsible for the performance of sub-contractors. All sub-contractors shall be legally established in one of the CTBT states signatories (list available on the CTBTO website at www.ctbto.org under [Status of Signatures and Ratifications | CTBTO](#).)

8. Work permits and Visas

Please note that it is the Bidder's responsibility alone to obtain work permits or visa or similar for the personnel proposed to implement this project. The Commission will make no effort nor accept any responsibility for obtaining work permits or visa or similar for the Contractor's personnel.

9. Delivery Schedule

Delivery time shall be indicated in weeks after receipt of an order and shall be firm during the validity of the Proposal and comply with the delivery requirements specified in the Terms of Reference.

PART II: FINANCIAL PROPOSAL

Please complete **Attachment 3 “Price Schedule Form”**. You are required to define the Unit Prices in EURO (for EU Companies) or US Dollars, exclusive of taxes.

- (i) In presenting the cost for each item, adequate justification and calculation must be included in the cost Proposal. All individual costs shall be stated in EURO or US Dollars and be computed to constitute the total Contract Price. Note that clear and detailed explanations would enable us to evaluate the Proposal promptly and proceed with fewer requests for clarifications/justifications at a later stage. This is also a factor influencing the decision for Contract award.
- (ii) In principle the Commission is exempt from taxes. Since the arrangement under which such exemption is respected varies from country to country, the selected bidder will be informed by the Commission whether tax exemption will occur at source or whether taxes paid by the selected bidder will be reimbursed by the Commission upon submission of the original supporting documentation.

(1) For Austrian companies

The price quoted shall be net of Taxes. All applicable Taxes payable by the selected bidder at the conclusion or implementation of the Contract in respect of the goods/services shall be quoted separately or be separately identified on the Proposal together with information on the nature of the tax and its method of calculation.

(2) For European Union (EU) Companies

The price quoted shall be net of Taxes. All applicable Taxes payable by the selected bidder at the conclusion or implementation of the Contract in respect of the goods/services shall be quoted separately or separately identified on the Proposal together with information on the nature of the Tax and its method of calculation. Due to the VAT exemption applicable to the Commission, no VAT will be charged to the Commission by the EEC Suppliers under the Contract (Ref. EU VAT Council Directive 2006/112/EC, Article 151).

(3) For Non-EU Companies

The price quoted shall be net of Taxes. All applicable Taxes payable by the selected bidder at the conclusion or implementation of the Contract in respect of the goods/services shall be quoted separately or be separately identified on the Proposal together with information on the nature of the tax and its method of calculation. For deliveries to Vienna, Austria, and due to the tax exemption at source applicable to the Commission, no Taxes shall be charged to the Commission under the Contract.

11. Completeness and Correctness of the Proposal

The Commission reserves the right to verify all information furnished by you in the Proposal through a source of its choice. Any inaccurate information so given may lead to the rejection of the Proposal.

12. Validity of the Proposal

The Proposal shall be valid for ninety (90) days after the deadline for its submission to the Commission, unless an extension of validity has been requested by the Commission.

13. Correction of Errors

The Commission will check the Proposal for any arithmetic errors. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.

14. Evaluation of Proposal

- (a) The Commission will conduct the evaluation based on the criteria and method specified in **Attachment 2** "Evaluation Criteria and Method".
- (b) The Commission, based on the evaluation criteria and method given in Attachment 2, will determine the Proposal(s) that "most effectively satisfies the technical and operational requirements set out in the solicitation documents", subject to contractual and commercial compliance.
- (c) The Commission reserves the right, as it deems appropriate, to award to a single bidder, to award to multiple bidders in any combination or not to award to any of the bidders as a result of this RFP.

15. Negotiations of the Proposal

The Commission reserves the right to request clarifications on the Proposal and to enter into negotiations regarding technical or commercial aspects of the Proposal before awarding the contract under this RFP.

16. Modification and Withdrawal of the Proposal

Bidders may modify or withdraw their Proposals after their submission, provided that written notice of the modification or withdrawal is received by the Commission by the closing date for the submission of the Proposal. The Proposal may not be modified subsequent to the closing date.

17. The Commission's Right to Reject the Proposal

The Commission reserves the right to accept or reject the Proposal or to annul this procurement process at any time prior to the award of contract without having to inform the bidders of the grounds therefore, without thereby incurring any liability to the bidders.

18. Costs of preparation and submission of the Proposal

Bidders shall bear all the costs associated with the preparation and submission of their Proposal and the Commission will not be responsible or liable for those costs, regardless of the outcome of this RFP.

19. Proprietary Information

All documentation and information contained in this RFP are proprietary to the Commission and shall not be duplicated, used or disclosed -in whole or in part- for any purpose other than to evaluate them and respond to the Commission's request for Proposal or otherwise without prior written agreement of the Commission.

Use of former Preparatory Commission for the CTBTO (“Commission”) employees in the preparation of Proposals:

A Bidder must not, in the absence of prior written approval from the Commission, permit a person to contribute to, or participate in, any process relating to the preparation of a Proposal or the procurement process if the person:

- a. At any time during the 12 months immediately preceding the date of issue of the Solicitation was an official, agent, servant or employee of, or otherwise engaged by the Commission;
- b. At any time during the 24 months immediately preceding the date of issue of the Solicitation was an employee of the Commission personally engaged, directly or indirectly, in the definition of the requirements, project or activity to which the Solicitation relates.

BIDDER'S STATEMENT
PLEASE STATE BELOW & SUBMIT WITH PROPOSAL

Delivery Time:

Shipping weight (kg) and Volume (m³) – if applicable:

List of recommended consumables and spares including prices and details on local availability, if applicable (please tick):

☐ For one-year period ☐ For a period of

Warranty period applicable (it shall be for a **minimum of 24 months**, starting from the acceptance of the goods/services by the Commission) – please tick below:

☐ For a two-year period ☐ For a period of

Availability of local service in Vienna, Austria (if any):

State country of origin or assembly of all items quoted:

Quantity discount and early payment discount (if any):

Include documentary evidence of qualifications to perform the order, which shall establish to the Commission's satisfaction that the bidder has the financial, technical and production capability necessary to perform the order in its entirety and to provide spare parts and other necessary on-going services as required.

Included in this quotation: **Yes** ☐ **No** ☐

Confirmation that the bidder has reviewed the Commission's Model Contract, License Agreement and General Conditions of Contract and agreed to all terms and conditions.

Yes ☐ **No** ☐

Remarks:

With regards to the software provided with the equipment, state and confirm whether the software licenses are transferable to third parties, i.e. the Commission or the Commission's State Signatories (Member States).

Yes ☐ **No** ☐ **Not applicable** ☐

Remarks:

Name:

Name & Title of Contact Person:

Signature & date:

ATTACHMENT 1-
MINIMUM CONTENT OF TECHNICAL PROPOSAL AND TECHNICAL COMPLIANCE MATRIX

**RFP 2025-0154/SANZ - SOFTWARE APPLICATION FOR THE VISUALISATION,
PROCESSING, AND CLASSIFICATION OF INITIAL OVERFLIGHT DATA**

Bidders are requested to demonstrate compliance with the requirements and add any further information in support of their Proposal. Please refer to the relevant section of the Terms of Reference for further explanation of the requirements. The information provided will form an integral part of the technical evaluation process.

Part II of this document must be completed and returned as part of the Technical Proposal.

Part I - Minimum Content of the Technical Proposal

Item	Minimum content
1. Executive Summary	
	Provide an overview of the proposal
2. Experience, Resources and Project Management	
Corporate Profile and Values of the Contractor	• Brief background of the company, mission/vision, ownership, size, location, number of personnel by type profile, etc. • Company business structure and its authority to execute all Work under the Contract. • If a consortium, provide a clear explanation of the business relationship between the members and governance for the execution of this project • In case the Bidder requires the services of subcontractors, the Proposal shall include: a) Relationship of the Bidder's business to any subcontractor(s) that will be used. b) Names, addresses, legal status, and qualifications of major sub-contractor(s) proposed by your organization. c) The scope of work and nature of subcontracting.
Corporate Experience	The Proposal should detail the Bidder's experience in executing services of similar scope and complexity. Valid requested certificates should be included in the proposal.
Requirements for the Contractor and personnel	The Proposal should address and describe all requirements spelled out under Section 4.1 of the Terms of Reference (ToR). At least 2 CVs of the proposed personnel shall be provided.
3. Meeting the Requirements	

Item	Minimum content
Understanding of the ToR scope	Describe your understanding of the services that are to be provided under this ToR, detailing key assumptions that impact the Technical Proposal.
4. Contractor's key staff	
	Provide written confirmation that the Bidder understands and agrees to take responsibility for obtaining any Visa and/or work permits, which may be required to perform the Service under the Contract. The CTBTO does not sponsor work permits for contractors.
5. Model Contract	
	A statement that the bidder has carefully reviewed the Model Contract and its Annexes and is in agreement with all its terms and conditions. Deviations, if any, shall be clearly indicated and justified in the Financial Proposal in an exception list.
6. Attachments (as set out in section 9 of the Instructions for the Preparation of Proposals)	
	- Statement of Confirmation - Vendor Profile Form - Bidder's Statement

Part II - Compliance Matrix – Please return duly filled-in together with the Technical Proposal

Ref No. of ToR	Requirements <i>A section-by-section response to each section of the Terms of Reference is included in the Proposal</i>	Compliance		Indicate the section in your Proposal and ensure that it is sufficiently described in the Proposal
		Yes	No	
3	Scope			
	The Contractor shall develop the System to run on the CRU or on a dedicated Windows 11 laptop, to which the acquired data will be available locally, and would allow for: - Contextual visualisation of all recordings taken during the IOF; - The processing and classification of data; and - Synchronous playback of the recordings.			
3.1	Visualisation of acquired data			

Ref No. of ToR	Requirements <i>A section-by-section response to each section of the Terms of Reference is included in the Proposal</i>	Compliance		Indicate the section in your Proposal and ensure that it is sufficiently described in the Proposal
		Yes	No	
3.2	Organizing and classifying the processed data			
3.3	Synchronous playback of the recordings			
4	Organisation of the work			
	The work will be split into three (3) phases, each one organized into multiple development sprints with the duration of 3-4 weeks. Total work package will not exceed 130 person-days of work; the Commission does not guarantee any minimal order.			
4.1	Initiating work On Contract award, the Contractor shall: 1.Assign a project development and management team; 2.Submit paperwork to the Commission for Contract software developers to gain access to Commission: •Code repository and version control application (e.g., GitLab); •Task management tool (e.g., JIRA); •Document repository (e.g., Confluence). 3.Organize a kick-off meeting, either virtual or at the CTBTO TeST Centre in Seibersdorf, Austria, and the start of development no later than in one (1) month following the Contract award.			
4.3	Deliverables			
4.3.1	The Contractor shall provide: At the beginning of each phase, a non-binding estimate (in person-days) and duration of the phase, and a phase plan in form of a version-controlled document in the Commission's Confluence document repository.			

Ref No. of ToR	Requirements <i>A section-by-section response to each section of the Terms of Reference is included in the Proposal</i>	Compliance		Indicate the section in your Proposal and ensure that it is sufficiently described in the Proposal
		Yes	No	
4.3.2	At the end of each phase, a phase report (in form of a version-controlled document in the Commission's Confluence document repository) and a stable System version (binary and/or installer in the Commission's Git code repository) that includes all the functions implemented during the phase.			
4.3.3	At the beginning of each sprint, a sprint plan including binding estimate in person-days and duration of the sprint, add duly filled tickets in the Commission' Jira task manager.			
4.3.4	At the end of each sprint, a sprint report (e.g., in form of an automatic report generated by the Commission' Jira task manager), up-to-date source code in the Commission's Git repository, and up-to- least installation instruction, user manual, test report) in the Commission's Confluence document repository			
4.4	Acceptance protocol At the beginning of each phase, the Commission and the Contractor shall jointly prepare the Commission will prepare and approve with the Contractor the test protocol that it the Commission will use for accepting the deliverables at the end of the phase. In general, it expects that: 1.the Contractor shall deliver the System implementing all functions agreed for a particular sprint/phase; 2.the Contractor shall test the System against the acceptance test protocol, log all inconsistencies in the task manager, and provide a test report; 3.the Contractor shall regularly (at least weekly), update the task manager, document repository, and code repository throughout each sprint and phase;			

Ref No. of ToR	Requirements <i>A section-by-section response to each section of the Terms of Reference is included in the Proposal</i>	Compliance		Indicate the section in your Proposal and ensure that it is sufficiently described in the Proposal
		Yes	No	
	4.the Contractor shall fix known identified inconsistencies during the upcoming sprints at its own expense. The Commission may ask the Contractor's lead developer (or another team member) to travel to the CTBTO TeST Centre in Seibersdorf, Austria for the conduct of any acceptance test.			
5	Requirements			
5.1	Contractor Requirements The Contractor shall:			
	1.Be a company established for at least four (4) years.			
	2.Have a minimum of four (4) years of experience using a formal project management methodology and have a minimum of four (4) years of experience in providing software development services using an Agile methodology, preferably Scrum.			
	3. Have a minimum of three (3) years of experience developing or customizing GIS-like software systems allowing for a contextual visualization and processing of geo-localized/geo-tagged data. The Contractor shall provide references to at least two (2) such systems it has developed or substantially customized			
5.2	Staff of the Contractor Staff assigned to the project shall:			
	4. Have a minimum of three (3) years of experience working with a modern issue tracking and ticket management systems, for example Jira; code repository, for example Git; and document repository, for example Confluence.			

Ref No. of ToR	Requirements <i>A section-by-section response to each section of the Terms of Reference is included in the Proposal</i>	Compliance		Indicate the section in your Proposal and ensure that it is sufficiently described in the Proposal
		Yes	No	
	5. Have a minimum of three (3) years of experience (demonstrated in the CV)) with a modern technology stack allowing for developing and maintaining the System, and compatible with Windows 11.			
5.3	Development requirements 6. The Contractor shall clearly specify the technology stack it intends to use during the project; subsequent deviations from this stack are only possible after the Commission's approval.			
	7. The Contractor shall seek for the Commission approval for any third-party or pre-existing invention (such as an algorithm, software library, etc.) that it intends to use while developing the System, specifying its licensing terms and technical implications on the System.			
	7. Although formal certification is not requested, the Contractor shall follow applicable industry standards and best practices in the software development and the quality assurance,			
5.4	Project requirements 9. Provide documented evidence, in the form of a plan, that the Contractor will be able to adjust the working hours of its relevant staff (e.g., project manager and lead developers), assigned to a Software Team, to overlap at least two hours with the Commission's working hours (9 am to 5 pm CET), on the Commission's request.			
	10. Provide written assurance that all documentation, communication (written and oral), and code (comments, commits description, class/function/variable names) supplied to the Commission shall be in English and submitted in an electronic form.			

Ref No. of ToR	Requirements <i>A section-by-section response to each section of the Terms of Reference is included in the Proposal</i>	Compliance		Indicate the section in your Proposal and ensure that it is sufficiently described in the Proposal
		Yes	No	
	11.The Contractor shall assign a maximum of two (2) software developers to for the project, not including supplementary roles such as project manager, quality assurance engineer, UX/UI designer. The Contractor shall minimize changes to the development team assigned to the project. Should onboarding of new staff be required, it will be done at the Contractor's expense.			
	12.The Contractor shall assign a single point of contact for all technical communications with the Commission, and a single point of contact (same or different) for administrative and financial matters. The Contractor's point(s) of contact shall be proficient in written and oral English.			
6	IP Rights			
	The Commission will be the owner of all the project deliverables (listed in 4.3) and associated intellectual property rights, except for the third-party and Contractor's pre-existing inventions explicitly listed and mutually agreed at the start of development.			
	The Contractor shall use the Commission's Git, Jira, and Confluence (for which the Commission will provide access to at the beginning of the project) for all deliverables, unless a different arrangement is mutually agreed between the Contractor and the Commission.			
7	Warranty			
	The Supplier shall provide warranty for a period of two (2) years. Warranty shall include fixing any inconsistency with the present ToR, which was discovered at any time before or during the warranty period.			
8	Risk Management			

Ref No. of ToR	Requirements <i>A section-by-section response to each section of the Terms of Reference is included in the Proposal</i>	Compliance		Indicate the section in your Proposal and ensure that it is sufficiently described in the Proposal
		Yes	No	
	The Contractor shall provide a thorough risk assessment plan at the project's commencement to identify potential risks that could impact the successful execution of the outlined implementation activities in this Terms of Reference (ToR). Risks may include but are not limited to technical challenges, changes in project requirements/scope, resource constraints, schedule delays, integration difficulties, and third-party software dependencies. The risk assessment plan should be continuously updated, aligning with the delivery of project milestones and significant accomplishments. Upon the project's satisfactory completion, the Contractor is obligated to conduct a final review of the initially identified risks. Risks that have been effectively mitigated or did not materialize should be officially closed, accompanied by appropriate documentation. The insights gained from the risk management process should be methodically documented and shared with the CTBTO, thereby contributing to the knowledge repository for forthcoming software development endeavours.			
9	Timeframe requirements			
	Tentative schedule is provided in 4.2. While this schedule is subject to change, it is expected that the development starts no later than in one (1) month after the Contract award, the MVP is delivered before the field test in Q1 2026, and the production-ready system is delivered before the IFE 2026 (i.e., latest in Q2 2026).			

Attachment 2- Evaluation Criteria and Matrix

RFP 2025-0154/SANZ. SOFTWARE APPLICATION FOR THE VISUALISATION, PROCESSING, AND CLASSIFICATION OF INITIAL OVERFLIGHT DATA

Stage 1		
Ref No. in TOR	1.QUALIFICATION REQUIREMENTS	PASS/FAIL
5.1	Contractor Requirements	
5.1.1	Shall be a company established for at least four (4) years	PASS/FAIL
5.1.2	Shall have a minimum of four (4) years experience using a formal project management methodology and to have a minimum of four (4) years of experience in providing software development services using an Agile methodology, preferably Scrum.	PASS/FAIL
5.2	Staff of the Contractor	
5.2.4	Shall have a minimum of three (3) years of experience working with a modern issue tracking and ticket management systems, for example Jira, code repository, for example Git, and document repository, for example Confluence.	PASS/FAIL
5.2.5	Shall have a minimum of three (3) years of experience (demonstrated in the CV)) with a modern technology stack allowing for developing and maintaining the System, and compatible with Windows 11.	PASS/FAIL
5	5.3 Development Requirements	
5.3.7	Shall seek Commission approval for any third-party or pre-existing invention (such as an algorithm, software library, etc.) that it intends to use while developing the System, specifying its licensing terms and technical implications on the System.	PASS/FAIL
5.3.8	Although formal certification is not requested, the Contractor shall follow applicable industry standards and best practices in the software development and the quality assurance.	PASS/FAIL
5.4	Project Requirements	
5.4.9	Provide documented evidence, in the form of a plan, that the Contractor will be able to adjust the working hours of its relevant staff (e.g., project manager and lead developers), assigned to a Software Team, to overlap at least two hours with the Commission's working hours (9 am to 5 pm CET), on the Commission's request.	PASS/FAIL
5.4.10	Provide written assurance that all documentation, communication (written and oral), and code (comments, commits description, class/function/variable names) supplied to the Commission shall be in English and submitted in an electronic form.	PASS/FAIL
5.4.11	The Contractor shall assign a maximum of two (2) software developers to the project, not including supplementary roles such as project manager, quality assurance engineer, UX/UI designer. The Contractor shall minimize changes to the development team assigned to the project. Should onboarding of new staff be required, it will be done at the Contractor's expense	PASS/FAIL
5.4.12	The contractor shall assign a single point of contact for all technical communications with the Commission, and a single point of contact (same or different) for administrative and financial matters. The Contractor's point(s) of contact shall be proficient in written and oral English.	PASS/FAIL
	Additional	
6	Transfer of the IP rights for all deliverables, except for eventual pre-existing inventions. The Contractor shall use the Commission's Git, Jira, and Confluence for all deliverables.	PASS/FAIL
7	Minimum 2 year warranty period including fixing any inconsistency with the ToR, that are discovered at any time before or during the warranty period.	PASS/FAIL
9	Acceptance of the timeframe requirements	PASS/FAIL

Stage 2				
Ref No. in TOR	2. TECHNICAL REQUIREMENTS - EVALUATION CRITERIA AND METHOD	Points		
	Quality of the Proposal	Max Points	Factor	Weighted score
Overall	Extent to which all aspects of the ToR have been addressed in sufficient detail and clarity	5	5	25
2, 3	Understanding of the scope of work and the responsibilities of the Contractor	5	2	10
5.1.3	The Contractor shall have a minimum of three (3) years of experience developing or customizing GIS-like software systems allowing for a contextual visualization and processing of geo-localized/geo-tagged data. The Contractor shall provide references to at least two (2) such systems it has developed or substantially customized.	5	4	20
5.3.6	The Contractor shall clearly specify the technology stack it intends to use during the project; subsequent deviations from this stack are only possible after the Commission's approval.	5	3	15
8	Risk management approach of the bidder addressing Section 8 of the ToR	5	1	5
TOTAL - Technical evaluation		25		75

EVALUATION METHOD:

1. Technical Evaluation:

The technical evaluation process will be done in two stages:

- 1) **Stage 1:** Technical proposals will first be evaluated against the mandatory requirements outlined in section 1 above, on a PASS/FAIL basis. Compliance with all mandatory requirements is required in order to pass stage 1 of the technical evaluation and to be further considered for stage 2 of
- 2) **Stage 2:** The technical proposals that have passed stage 1 of the technical evaluation process, will be evaluated against the weighted criteria set. In order to pass this stage, bidders must obtain a minimum score of **45** in accordance with the scoring table indicated below.

POINTS	TABLE 2
0	Unsatisfactory - Response incomplete, inadequate and/or non-responsive to the criterion. Bidder does not clearly understand the criterion.
1 - 2	Weak - Does not meet the minimum technical, functional, or performance related criterion.
3	Good - Meets the minimum requirements of the criterion.
4	Very good - Exceeds the criterion in some areas.
5	Excellent - Exceeds the criterion in all areas.

2. Financial and commercial evaluation

Once the technical evaluation is finalized, the financial offers of the technically compliant bidders will be evaluated in accordance with the formula giv

$$X = \text{Max Available Points} * Y/Z$$

Legend:

X= points to be assigned to the offer being evaluated

Y= price of the lowest priced, technically compliant offer

Z= price of the offer being evaluated

3. Selection

The weight of the technical and financial components is 60% and 40% respectively.

Attachment 3 Price Schedule

RFP 2025-0154 SOFTWARE APPLICATION FOR THE VISUALISATION, PROCESSING, AND CLASSIFICATION OF INITIAL OVERFLIGHT DATA

Ref. TOR	Service Description	Unit	Unit Cost (EUR /USD)
3	Daily rates for the software developer(s) to be assigned on the project; in case multiple software developers of different seniority will be assigned, daily rates for each one shall be specified.	Person day rate	
3	Daily rates for supplementary services, such as project management, quality assurance, UX/UI design, documentation, etc.	Person day rate	
3	Costs of licences and any required hardware, as applicable	Each	
	Travel ⁽⁴⁾		
3	Travel (2 days) for 1 person (lead developer) to CTBTO TeST centre Seibersdorf .	Lump-sum	
	Any other items (please specify)		

Notes:

- 1) The Price Schedule must provide a detailed cost breakdown of all goods and related services to be provided, from unit price to total prices.
- 2) The rates indicated in the Price List shall be firm and fixed throughout the term of the Contract.
- 3) Rates shall be free of tax. If tax is applicable please indicate it in a separate line.
- 4) The travel cost of the Contractor's lead developer to the CTBTO TeST Centre at Seibersdorf, Austria, shall be based on the most economical and direct route. Daily subsistence allowance (DSA) shall be calculated in accordance with the United Nations' effective daily subsistence allowance rate (<https://icsc.un.org/Home/DailySubsistence>).

VENDOR PROFILE FORM (VPF) – FOR PRODUCTS/SERVICES/WORK

1. Name of Company:		
2. Street Address:	3. Telephone:	
P.O. Box: City:	4. E-Mail:	
Zip Code: Country:	5. Website:	
6. Contact Person: Title:		
7. Legal Status (e.g. Partnership, Private Limited Company, Government Institution)		
8. Year Established:	9. Number of Employees:	
10. Gross Corporate Annual Turnover (US\$m)*:	11. Annual Export Turnover (US\$m)*:	
12. Type of Business/Products: Manufacturer ☐ Sole Agent ☐ Supplier ☐ Other ☐ (please explain)		
13. Type of Business/Services/Work: Engineering ☐ Civil Work ☐ Governmental Institution ☐ Other ☐ (please explain)		
14. References (your main customers, country, year and technical field of products, services or work): **		
15. Previous Supply Contracts with United Nations Organizations (over the last 3 years)** Organization: Value in US\$ Equivalent: Year: Organization: Value in US\$ Equivalent: Year:		
16. Summary of any changes in your company's ownership during the last 5 years:		

* Please provide a copy of the most recent audited annual report and accounts. Note: Export includes services or work performed abroad or for foreign clients.
 ** Please provide supplementary documentation on these items.

17. List of Products/Services/Work offered:	
Product/Service/Work #	Product/Service/Work Description

18. This section shall be **signed and stamped** by an official legally authorized to enter into contracts on behalf of your organization:

Name:	Title:	Signature:	Date:
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Bank Details Bank Name: Bank Address: Exact Account Holder Name:	Beneficiary Details Beneficiary Name: (exactly as stated on bank statements) IBAN: (if applicable) Account number: SWIFT/BIC: ABA/Sort Code:
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Additional Details (if applicable)

 Correspondent bank:

 Correspondent account number:

 Correspondent SWIFT/BIC:

 Tax Identification Number:

FOR CTBTO USE ONLY		
Evaluated By:	Initials	Date:
Updated By:	Initials	Date:
Remarks:		

* Please provide a copy of the most recent audited annual report and accounts. Note: Export includes services or work performed abroad or for foreign clients.
 ** Please provide supplementary documentation on these items.

STATEMENT OF CONFIRMATION

On behalf of (name of firm or organization): _____, I hereby attest and confirm that:

- a) The firm/organization possesses the legal status and capacity to enter into legally binding contracts with the Commission for the supply of equipment, supplies, services or work.
- b) The firm/organization is not insolvent, in receivership, bankrupt or being wound up, and not under administration by a court or a judicial officer, and that it is not subject to the suspension of its business or legal proceedings for any of the foregoing reasons.
- c) The firm/organization has fulfilled all its obligations to pay taxes and social security contributions.
- d) The firm/organization has not, and that its directors and officers have not, within the last five years been convicted of any criminal offense related to professional conduct or the making of false statements or misrepresentations as to their capacity or qualifications to enter into a procurement or supply contract.
- e) The Commission, in the event that any of the foregoing should occur at a later time, will be duly informed thereof, and in any event, will have the right to disqualify the firm/organization from any further participation in procurement proceedings.
- f) The firm/organization did not/will not attempt to influence any other bidder, organization, partnership or corporation to either submit or not submit a proposal/bid/quotation.
- g) The firm/organization will not, in the absence of a written approval from the Commission, permit a person to contribute to, or participate in, any process relating to the preparation of a Quotation/Bid/ Proposal or the procurement process if the person:
 - a. at any time during the 12 months immediately preceding the date of issue of the Solicitation was an official, agent, servant or employee of, or otherwise engaged by the Commission;
 - b. at any time during the 24 months immediately preceding the date of issue of the Solicitation was an employee of the Commission personally engaged, directly or indirectly, in the definition of the requirements, project or activity to which the Solicitation relates.
- h) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any) have been identified on, or associated with any individual, groups, undertakings and entities identified on, the list established pursuant to the UN Security Council Resolution 1267 (Consolidated Sanctions List).¹
- i) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any) are subject to any form of sanction imposed by an organization or body within the United Nations System, including the World Bank.

¹ The Consolidated United Nations Security Council Sanctions List can be found on the following website:
<https://www.un.org/securitycouncil/content/un-sc-consolidated-list>

- j) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any), is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.
- k) Neither the organization/firm, its parent entities (if any), nor any of its subsidiary or affiliated entities (if any) will use the funds received under contracts/purchase orders with the Commission to provide support to individuals, groups, undertakings or entities associated with terrorism.
- l) The prices in the firm/organization's proposal/bid/quotation have been arrived at independently, without consultation, communication or agreement with any other interested companies, competitor or potential competitor with a view to restricting competition.
- m) The Commission shall have the right to disqualify the firm/organization from participation in any further procurement proceedings, if it offers, gives or agrees to give, directly or indirectly, to any current or former staff member of the Commission a gratuity in any form, an offer of employment or any other thing of service or value, as an inducement with respect to an act or a decision of, or a procedure followed by, the Commission in connection with a procurement proceeding.
- n) The Commission shall have the right to disqualify the firm/organization from participation in any further procurement proceedings if it does not disclose to the Commission any situation that may appear as a conflict of interest, and if it does not disclose to the Commission if any official or professional under contract with the Commission have an interest of any kind in the firm/organization's business or any kind of economic ties with the firm/organization.
- o) The firm/organization expressly agrees to abide by the United Nations Supplier Code of Conduct.¹

Name (print): _____

Signature: _____

Title/Position: _____

Place (City and Country): _____

Date: _____

¹ <https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct>

MODEL CONTRACT

(SAP No.)

between

THE PREPARATORY COMMISSION
FOR THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY
ORGANIZATION

and

THE NAME OF THE CONTRACTOR

for

the provision of services pertaining to
**SOFTWARE APPLICATION FOR THE VISUALISATION,
PROCESSING, AND CLASSIFICATION OF INITIAL OVERFLIGHT
DATA**

This Contract comprises this cover page, a table of contents, 9 (nine) pages of text, a signatories page, a List of Annexes and 3 (three) Annexes (A to C)

October 2025

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Commented [LSS1]: Clause 7 (Organisation of Contract Implementation) was missing and has been added to the Table of Contents. Please double-check the page numbers.

MODEL CONTRACT

This CONTRACT is entered into between the PREPARATORY COMMISSION FOR THE COMPREHENSIVE NUCLEAR-TEST-BAN TREATY ORGANIZATION (hereinafter referred to as the “Commission”), having its office located at Wagramer Strasse 5, 1400 Vienna, Austria, and _____ (hereinafter referred to as the “Contractor”), having its registered office located at _____ [address] (both hereinafter individually referred to as the “Party” and collectively as the “Parties”).

The Parties hereto mutually agree as follows:

1 DEFINITIONS

In this Contract, words and expressions shall have the same meanings as respectively assigned to them in the General Conditions of Contract and the Terms of Reference. In addition, the following words and expressions shall have the meanings hereby assigned to them:

[“**Annex A**” means the Commission’s License Agreement] **To be included in the event that the Contractor is using pre-existing software and will grant a license to the Commission. If this is not the case, the Annexes will be renumbered.**

“**Annex B**” means the Commission’s General Conditions of Contract.

“**Annex C**” means the Commission’s Terms of Reference.

“**Annex D**” means the Contractor’s Proposal dated XXX.

“**Contract**” means this document, its Annexes and any further modifications or such further documents as may be expressly incorporated in this Contract by the Parties in accordance with Clause 21 below.

“**Contractor**” means the legal entity named in the preamble of this Contract or its successors. The Contractor shall be the only interface for all matters pertaining to execution of the Work under this Contract.

“**Goods**” means the equipment to be supplied and delivered by the Contractor under the Contract as requested by the Commission under the WO.

“**Services**” means the activities or tasks to be performed by the Contractor under the Contract as requested by the Commission under the WO.

“**Software**” means the software developed by the Contractor for the Commission in accordance with Annexes [C and D].

“**Party(ies)**” means the Commission and/or the Contractor, as the context requires.

["Pre-existing Software" means any pre-existing software/invention/algorithm/modules/library used by the Contractor to develop the Software for the Commission] **To be included if applicable.**

"Rule(s)" means any regulation(s), official directive(s), ordinance(s), guideline(s), customs and practices.

"Work" means all the Goods and Services to be provided by the Contractor, including its affiliates and/or subcontractors, in order to fulfil all its obligations under the Contract, and the remedying of any defects therein.

"Work Orders ('WO')" mean orders issued by the Commission which specify the (parts or portions of) Work to be performed by the Contractor upon request by the Commission in accordance with Annexes B and C.

2 AIM OF THE CONTRACT

The aim of this Contract is the provision of Services pertaining to Software Application for the Visualisation, Processing, And Classification Of Initial Overflight Data" (hereinafter referred to as the "Services" or "Work") to the Commission.

3 ENTRY INTO FORCE AND DURATION OF THE CONTRACT

The Contract shall enter into force upon the date of the last signature by the authorized Representatives of the Parties (hereinafter referred to as the **"Effective Date"**) and shall be valid until the Parties fulfill all their obligations hereunder.

4 COMMENCEMENT AND COMPLETION OF THE WORK

The Commission shall have the right, but not obligation, to call-off the Work in the form of WO within a period of eighteen (18) months from the Effective Date or the performance of a maximum of 130 (one hundred and thirty) person-days by the Contractor, whichever occurs first (hereinafter referred to as the **"Call-off Period"**). The commencement and completion date for the performance of the Work (hereinafter referred to as **"Commencement Date"** and **"Completion Date"**, respectively) will be set out in the respective WO.

5 STANDARD OF WORK

The Contractor shall perform the Work in a workmanlike manner in conformity with standard professional practices, using qualified personnel and in strict accordance with the Contract. The Contractor shall furnish the highest skill and judgement and cooperate with the Commission, including all the Commission's consultants and agents, in best furthering the interests of the Commission and the aim of this Contract. The Contractor shall provide efficient business administration and supervision, and it shall perform the Work in the best way and in the most expeditious and economical manner consistent with the requirements of the Contract.

6 RESPONSIBILITIES OF THE CONTRACTOR

- (a) The Contractor shall perform the Work described in [Annexes C and D]
- (b) The Contractor shall provide qualified English-speaking personnel as necessary to perform the Work under this Contract. The key persons shall be available for possible tasks related to the Work throughout the duration of the Contract period. Any replacement of the key personnel shall be made in accordance with Clause 7 of [Annex B].
- (c) The Contractor acknowledges that after the completion of the Work under this Contract, the Commission shall own the Software and source code described in [Annexes C and D] and the Contractor shall have no rights in that Software or source code unless granted by the Commission under Clause 24 of this Contract.

(d) [The Contractor as the owner of the Pre-existing Software shall grant the license to the Commission in accordance with Annex A]. **To be included if applicable.**

7 ORGANISATION OF CONTRACT IMPLEMENTATION

- (a) During the term of the Contract, the Commission has the right, but not the obligation, to initiate performance of the Work through the issuance of individual WOs in accordance with sections 4 of [Annex C] based on the firm fixed unit prices set out in Annex D. The Contractor shall not perform any Work if not requested by the Commission through an WO. However, the Contractor may propose a WO for the Commission's evaluation.
- (b) The WO issued by the Commission shall be the basis for acceptance, invoicing and payment of any Work performed by the Contractor.
- (c) The performance of the Work shall be made in full in accordance with the respective WO. Partial service performance of a WO will not be accepted and reimbursed without prior written agreement by the Commission.
- (d) The Work shall be performed at the place and within the approved Work Plan specified in the relevant WO.
- (e) The Commission may revise a WO as and when it may deem necessary.

Commented [LSS2]: Is this a correct reference (is it supposed to refer to the Terms of Reference or the Contractor's Proposal)? Please double-check.

Commented [ES3R2]: Corrected to Section 4 .Annex C (TOR) is correct.

8 WARRANTY

- (a) The provisions of Clause 28 of [Annex B] apply to the Work performed by the Contractor.
- (b) The Contractor shall ensure that the Commission shall experience no loss of service or support level by sub-contractors or repair agents acting on behalf of the Contractor.

9 PERMITS, NOTICES, LAWS AND ORDINANCES

- (a) The Contractor shall obtain and pay for all permits and inspections necessary for the proper execution and completion of the Work that are customarily obtained upon execution of this

Contract and that are legally required at the time the Proposal is received by the Commission. This shall include, but not be limited to, work permits, visa, or similar.

- (b) The Contractor shall give all notices required by the nature of the Work.
- (c) If the Contractor notices that the Work or any part thereof required under this Contract is not in accordance with applicable laws and Rules, or with technical or safety standards, it shall promptly notify the Commission thereof in writing.

10 PROTECTION OF PERSONS AND PROPERTY

- (a) The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programmes in connection with the Work.
- (b) The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury and loss to:
 - (i) all employees on the Commission's premises and all other persons who may be affected thereby;
 - (ii) all the Work, equipment, its spare parts, materials and supplies to be incorporated therein, whether in storage on or off the Commission's premises, which are under the care, custody or control of the Contractor or any of its subcontractors; and
 - (iii) other property on the Commission's premises or adjacent thereto.
- (c) The Contractor shall give all notices and comply with all applicable laws and Rules bearing on the safety of persons and property and/or their protection from damage, injury and loss.
- (d) The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for the safety and protection of persons and property, including posting danger signs and other warnings against hazards and promulgating safety regulations.
- (e) When the use or storage of combustible, explosive or other hazardous materials is necessary for the execution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.
- (f) The Contractor shall be responsible for the prevention of accidents on the Commission's premises during the execution of the Work.
- (g) In any emergency affecting the safety of persons or property, the Contractor shall promptly act to prevent threatened damage, injury and loss.
- (h) The Contractor shall promptly remedy all damage and loss to any property, referred to in Sub-Clause (b) above, caused in whole or in part by the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under Sub-Clause (b) above, except damage and loss attributable to the acts or omissions of the Commission or anyone directly or indirectly employed by it, or of anyone for whose acts the Commission may be

liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to its obligations under Clause 9 of [Annex B].

11 RESPONSIBILITIES OF THE COMMISSION

The Commission shall designate members of its staff to act as points of contact for the Contractor to ensure that the Work is carried out in accordance with [Annexes C and D] and shall promptly notify the Contractor thereof. The Commission shall respond promptly to requests for information by the Contractor regarding the Work.

12 CONTRACT PRICE

- (a) The Commission shall pay to the Contractor, in consideration of the full and proper performance of its obligations under the Contract, as follows:
 - (i) For each WO issued during the firm Call-off Period specified in Clause 4 above, the firm fixed unit prices pursuant to [Annex D];
 - (ii) If applicable, per diem charges (DSA), which cover lodging, meals and incidental travel expenses, based on the United Nations Daily Subsistence Allowance (UN DSA) rates effective at the time of the respective travel (the WO will include the UN DSA rates applicable at the time of issuance of the WO), unless specified otherwise by the Commission;

hereinafter referred to as the “Contract Price”.

- (b) The unit prices set out in [Annex D] shall be held fixed for the entire duration of the Contract.
- (c) The Contract Price shall cover all costs and expenses incurred by the Contractor for the full and proper performance of all relevant obligations under the Contract (including travel, allowances, management and remuneration of the personnel, national income tax, medical insurance, and social security contributions).
- (d) [The Contractor shall be reimbursed by the Commission for such taxes on the basis of actual amounts paid and duly documented by the Contractor as per Clause 13(e) below].

OR

[No Taxes are applicable under this Contract].

13 PAYMENT

- (a) The Contract Price shall be paid upon satisfactory completion of each deliverable for the Work and satisfactory completion of each WO and submission of the following:
 - i) Invoice drawn up in accordance with this Clause 13;
 - ii) [Documentation referred to in sub-Clause 13 (e) below supporting any Taxes paid];
 - iii) Supporting documentation of costs actually incurred, such as copies of air ticket, invoices, insurance policies and shipping documents, as appropriate; and

- iv) Any other documentation that might be required under the applicable WO.
- (b) The Commission will make the payments to the Contractor on the basis of an invoice submitted by the Contractor as per Sub-Clause (d) below. All payments shall be made within 30 (thirty) days of the receipt and acceptance of the invoice, provided that the Work has been satisfactorily completed and has been accepted by the Commission.
- (c) The making of any payment hereunder by the Commission shall not be construed as an unconditional acceptance by the Commission of the Work accomplished by the Contractor up to the time of such payment.
- (d) The Contractor shall submit an invoice electronically, from the Contractor's official e-mail address in PDF format, duly signed and stamped by the Contractor and submitted to the Commission's email address specified in Clause 22 below. Each invoice shall contain the Contract number (CTBTO and SAP numbers), detailed banking instructions, including the name and address of the Contractor's bank, account number, account holder's name and SWIFT, IBAN and/or ABA codes for payment by electronic transfer.
- (e) [Applicable Taxes payable by the Contractor and/or its subcontractor(s) in respect of the Work shall be invoiced separately or be separately identified on the invoice. Actual payment of the Taxes must primarily be supported by original documentation such as invoices, bank account statements, transfer orders, or receipts issued by the local tax or customs authorities. If submission of such original documentation is not possible for justifiable reasons, their copies could be accepted by the Commission provided that they are duly signed and certified by local tax or customs authorities. In case the currency in which the Taxes are levied is not the currency of the Contract, bank statements (or equivalent) showing the exchange rate used for the conversion should be submitted to the Commission, in addition to any other supporting documentation]. **To be included if taxes are applicable under this Contract.**

14 TEMPORARY SUSPENSION OF WORK

The Commission may, at any time, temporarily suspend the Work, in whole or in part, being performed by the Contractor under this Contract by giving 30 (thirty) days' advance notice in writing to the Contractor. The Work so suspended shall be resumed by the Contractor on the basis of a revised time schedule and on terms and conditions to be mutually agreed upon between the Parties.

15 DELAYS AND EXTENSION OF TIME

- (a) If the Contractor is delayed at any time in the progress of the Work by any act or omission of the Commission or by any of its employees, or by any other contractor employed by the Commission, or by changes in the Work ordered by the Commission, or by any causes beyond the Contractor's reasonable control, or by any other cause which the Commission determines may justify the delay, then the time for completion of the Work shall be extended by an amendment to this Contract in accordance with Clause 21 below for such reasonable time as the Commission may determine.
- (b) Any request for extension of the time for reasons referred to in sub-Clause 15(a) above shall be submitted to the Commission not later than 20 (twenty) days after the commencement of the delay, otherwise said request shall be deemed to be waived. Such request shall state

grounds for the delay and shall provide an estimate of the probable effect of such delay on the progress of the Work.

16 CONTRACTOR'S CLAIMS AND REMEDIES

In no event shall the Contractor make any claim against the Commission for or be entitled to additional costs or compensation resulting from any delays in the progress or completion of the Work or any portion thereof, whether caused by the acts or omissions of the Commission, including, but not limited to, damages related to overheads, loss of productivity, acceleration due to delay and inefficiency. The Contractor's sole remedy in such event shall be an extension of time for completion of the Work, provided the Contractor otherwise meets the requirements and conditions set forth in this Contract.

17 ENTIRE AGREEMENT

This Contract represents the final agreement in respect of the Work and shall supersede all prior agreements and representations between the Parties in this respect. Annexes [A to D] shall constitute integral parts of this Contract and shall be of full force and effect.

18 DISCREPANCIES

If there are discrepancies or conflicts between any of the documents that are part of this Contract, the document to prevail shall be given precedence in the following order:

- (i) This document;
- (ii) The Commission's License Agreement (Annex A);
- (iii) The Commission's General Conditions of Contract (Annex B)
- (iv) The Commission's Terms of Reference (Annex C);
- (v) The Contractor's Proposal (Annex D);
- (vi) The relevant WO.

19 SEVERABILITY

If any term and/or provision of this Contract is or becomes invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions of this Contract shall not in any way be affected or impaired thereby.

20 NO WAIVER

Failure by a Party to enforce a right shall not be deemed to be a waiver of that right unless otherwise expressly provided in this Contract.

21 CONTRACT AMENDMENT

No modification of, or change in, this Contract, or waiver of any of its provisions, or additional contractual relationship with the Contractor shall be valid unless approved in the form of a written amendment to this Contract, signed by duly authorized Representatives of the Parties.

22 TRANSMISSION OF NOTICES AND OTHER DOCUMENTS

Notices, invoices, reports and other documentation under the Contract shall be delivered or sent to the relevant Party as follows (or to such person/title, address or email address as the Party may substitute by notice after the date of the Contract):

- (a) The Commission:

For Contractual Issues:

*Chief, Procurement Section
Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization
(CTBTO)
Vienna International Centre
Wagramerstrasse 5, P.O. Box 1200
1400 Vienna, Austria
Tel: + (43 1) 26030 6350
E-mail: procurement@ctbto.org*

For invoices:

*Accounts Payable
CTBTO Financial Services Section
Vienna International Centre
Wagramerstrasse 5, P.O. Box 1200
1400 Vienna, Austria
Tel: + (43 1) 26030 6292
E-Mail: Payable_Invoices@ctbto.org*

For related enquiries:

Payments@ctbto.org

- (b) The Contractor:

For Contractual Issues and Invoices and Related Enquiries:

*Name:
Title
Address
Tel:
Email: [.....](#)*

23 EFFECTIVENESS

- (a) Except as provided below, any communication in connection with the Contract will be deemed to be given as follows:
 - (i) if delivered in person, at the time of delivery;
 - (ii) if by registered mail or courier, when received;
 - (iv) if by electronic communication, when retrievable by the Commission in document form.
- (b) A communication given under sub-Clause 23(a) above that is received or becomes retrievable on a non-working day or after business hours at the seat of the Commission will only be deemed to be given on the next working day of the Commission.

24 SOFTWARE LICENCE

The Commission hereby grants the Contractor a non-exclusive, non-transferable, irrevocable license to use the Software for the duration of the Contract and for the purpose of doing the Work under the Contract. The use of the source code is only for the duration of the Contract and for the Work required under the Contract. All title, ownership rights and intellectual property rights in and to the Software shall remain with the Commission. The Contractor acquires no title, right or interest in the Software, other than the license(s) specifically granted herein by the Commission.

IN WITNESS hereof, the duly authorized Representatives of the Parties have executed this Contract:

For and on behalf of **the PREPARATORY COMMISSION FOR THE COMPREHENSIVE
NUCLEAR-TEST-BAN TREATY ORGANIZATION:**

Name, Position/Title

Date: _____

Place: Vienna, Austria

For and on behalf of **[REGISTERED NAME OF THE CONTRACTOR]:**

Name, Position/Title

Date: _____

Place: _____

LIST OF ANNEXES

[ANNEX A: THE COMMISSION'S LICENSE AGREEMENT]

ANNEX B THE COMMISSION'S GENERAL CONDITIONS OF CONTRACT

ANNEX C : THE COMMISSION'S TERMS OF REFERENCE

ANNEX D: THE CONTRACTOR'S PROPOSAL

ANNEX A

[Option 1 – to be used when the Contractor is the owner of the software]

LICENSE AGREEMENT

1. PREAMBLE

1.1. This License Agreement is part of the Contract entered between the Commission and the Contractor (hereinafter collectively referred to as the “Parties”).

1.2. The Contractor possesses intellectual property rights to the software (hereinafter referred to as the “Software”) and relevant documentation (hereinafter referred to as the “Documentation”).

1.3. The Contractor is willing to grant and the Commission desires to acquire a non-exclusive, non-transferable and irrevocable License as provided below.

1.4. The Parties hereto have agreed as follows.

2. DEFINITIONS

As used herein, the following terms shall have the following definitions:

2.1. “License Agreement” means the present document.

2.2. “License” means the license to the Software and Documentation granted under this License Agreement.

2.3. “Documentation” means the Contractor’s copyrighted materials that document functions of the Software.

2.4. “Effective Date” means the date of the last signature by the representatives of the Parties of the Contract, on which the Contract shall enter into force.

2.5. “Eligible Users” means the Commission’s employees and/or direct contractors.

2.6. “Software” means the software listed in the Contract.

Capitalized terms shall have the same meaning as defined in the Contract and the General Conditions of Contract, unless expressly otherwise defined herein.

3. GRANT OF RIGHTS AND LICENSES

3.1. The Contractor hereby grants the Commission a non-exclusive, non-transferable, irrevocable License to use the Software and Documentation, under the terms and conditions set forth herein.

3.2. The Commission is authorized to use the Software and Documentation only for activities related to the fulfilment of mandate and purposes of the CTBT including the performance of services of the Commission’s own commercial and/or government customers. The Commission is not authorized to sublicense, distribute, sell, or grant access to the Software, or integrate it into products or computer software programs of third parties unless required for the performance of activities related to its mandate.

3.3. Access to, and use of, the Software is restricted to Eligible Users.

3.4. The Commission agrees to protect the Software and the Documentation from use by, or disclosure or distribution to, persons who are not Eligible Users.

3.5. The Commission is authorized to make copies of the Documentation provided by the Contractor only for internal distribution. Copies of the Software may be made by the Commission only for back-up and archival purposes.

3.6. The Commission agrees not to remove or destroy any proprietary markings, restrictive legends, or intellectual property notices on or in the Software and Documentation.

- 3.7. All title, ownership rights and intellectual property rights in and to the Software and the Documentation shall remain with the Contractor. The Commission acquires no title, right or interest in the Software or the Documentation, other than the License(s) specifically granted herein by the Contractor and the title to the media upon which the Software is delivered.

4. SUPPLY OF SOFTWARE AND DOCUMENTATION

- 4.1. The Contractor shall supply to the Commission a properly functioning and fully tested Software system, as well as its new versions, releases and/or upgrades.
- 4.2. The Contractor shall provide the Commission with the Documentation, as well as catalogues and other descriptive literature with respect to the Software and its new versions, releases and/or upgrades.

5. WARRANTY

- 5.1. The Contractor warrants that the licensing and use of the Software by the Commission in accordance with the terms of this License Agreement shall not infringe any copyright, patent or registered design rights of any third party.

6. INDEMNITY

- 6.1. If any claims of copyright infringement are asserted against the Commission by virtue of the infringement by the Contractor of a third party intellectual property rights through the grant of this Software License, the Contractor agrees, upon written notification of such claim by the Commission, to indemnify, hold and save harmless the Commission from and against all such suits, claims, demands and liability, including costs and expenses incurred by the Commission. The Commission shall give the Contractor due notice in writing of any such claim and, without prejudice to the Commission's privileges and immunities under international law, the Commission shall give the Contractor the opportunity to defend the Commission against any such claim at its discretion.
- 6.2. If, as a result of any claim, suit or proceeding so defended, any of the Software is held to constitute an infringement or its use by the Commission is enjoined, the Contractor shall, at its

option and expense, either (i) procure for the Commission the right to continue using said Software; (ii) replace it with substantially equivalent non-infringing Software; or (iii) modify it so that it becomes non-infringing.

- 6.3. If the violation of Software rights is the result of the use of the Software in combination with other products not delivered by the Contractor, then the Contractor shall not be held liable.

7. INSOLVENCY AND BANKRUPTCY

- 7.1. Should the Contractor become insolvent or be adjudged bankrupt, the Commission, after having paid the Contract Price, will retain the License to use the Software, whether or not the Commission elects to terminate the Contract under Clause 21 of the General Conditions of Contract.

ANNEX A

[Option 2 – to be used when the Contractor is not the owner of the software, but has a right to grant a license to the software]

LICENSE AGREEMENT

1. PREAMBLE

- 1.1. This License Agreement is part of the Contract entered between the Commission and the Contractor (hereinafter collectively referred to as the “Parties”).
- 1.2. The Contractor certifies that it has a right to grant a license (hereinafter referred to as the “License”) to the software (hereinafter referred to as the “Software”) and relevant documentation (hereinafter referred to as the “Documentation”) under this License Agreement, while the manufacturer of the Software retains all intellectual property rights to the Software and Documentation.
- 1.3. The Contractor is willing to grant and the Commission desires to acquire a non-exclusive, non-transferable and irrevocable License as provided below.
- 1.4. The Parties hereto have agreed as follows.

2. DEFINITIONS

As used herein, the following terms shall have the following definitions:

- 2.1. “License Agreement” means the present document.
- 2.2. “License” means the license to the Software and Documentation granted under this License Agreement.
- 2.3. “Documentation” means the manufacturer’s copyrighted materials that document functions of the Software.
- 2.4. “Effective Date” means the date of the last signature by the representatives of the Parties of the Contract, on which the Contract shall enter into force.
- 2.5. “Eligible Users” means the Commission’s employees and/or direct contractors.

- 2.6. “Software” means the software listed in the Contract.

Capitalized terms shall have the same meaning as defined in the Contract and the General Conditions of Contract, unless expressly otherwise defined herein.

3. GRANT OF RIGHTS AND LICENSES

- 3.1. The Contractor hereby grants the Commission a non-exclusive, non-transferable, irrevocable License to use the Software and Documentation, under the terms and conditions set forth herein.
- 3.2. The Commission is authorized to use the Software and Documentation only for activities related to the fulfilment of mandate and purposes of the CTBT including the performance of services of the Commission’s own commercial and/or government customers. The Commission is not authorized to sublicense, distribute, sell, or grant access to the Software, or integrate it into products or computer software programs of third parties unless required for the performance of activities related to its mandate.
- 3.3. Access to, and use of, the Software is restricted to Eligible Users.
- 3.4. The Commission agrees to protect the Software and the Documentation from use by, or disclosure or distribution to, persons who are not Eligible Users.
- 3.5. The Commission is authorized to make copies of the Documentation provided by the Contractor only for internal distribution. Copies of the Software may be made by the Commission only for back-up and archival purposes.

3.6. The Commission agrees not to remove or destroy any proprietary markings, restrictive legends, or intellectual property notices on or in the Software and Documentation.

3.7. All title, ownership rights and intellectual property rights in and to the Software and the Documentation shall remain with the manufacturer. The Commission acquires no title, right or interest in the Software or the Documentation, other than the License(s) specifically granted herein by the Contractor and the title to the media upon which the Software is delivered.

4. SUPPLY OF SOFTWARE AND DOCUMENTATION

4.1. The Contractor shall supply to the Commission a properly functioning and fully tested Software system, as well as its new versions, releases and/or upgrades.

4.2. The Contractor shall provide the Commission with the Documentation, as well as catalogues and other descriptive literature with respect to the Software and its new versions, releases and/or upgrades.

5. WARRANTY

5.1. The Contractor warrants that the licensing and use of the Software by the Commission in accordance with the terms of this License Agreement shall not infringe any copyright, patent or registered design rights of any third party.

6. INDEMNITY

6.1. If any claims of copyright infringement are asserted against the Commission by virtue of the infringement by the Contractor of a third party intellectual property rights through the grant of this Software License, the Contractor agrees, upon written notification of such claim by the Commission, to indemnify, hold and save harmless the Commission from and against all such suits, claims, demands and liability, including costs and expenses incurred by the Commission. The Commission shall give the Contractor due notice in writing of any such claim and, without prejudice to the Commission's privileges and immunities under international law, the Commission shall give the Contractor the opportunity to defend the Commission against any such claim at its discretion.

6.2. If, as a result of any claim, suit or proceeding so defended, any of the Software is held to constitute an infringement or its use by the Commission is enjoined, the Contractor shall, at its option and expense, either (i) procure for the Commission the right to continue using said Software; (ii) replace it with substantially equivalent non-infringing Software; or (iii) modify it so that it becomes non-infringing.

6.3. If the violation of Software rights is the result of the use of the Software in combination with other products not delivered by the Contractor, then the Contractor shall not be held liable.

7. INSOLVENCY AND BANKRUPTCY

7.1. Should the Contractor become insolvent or be adjudged bankrupt, the Commission, after having paid the Contract Price, will retain the License to use the Software, whether or not the Commission elects to terminate the Contract under Clause 21 of the General Conditions of Contract.

Annex B

Terms of Reference

SOFTWARE APPLICATION FOR THE VISUALISATION, PROCESSING, AND CLASSIFICATION OF INITIAL OVERFLIGHT DATA

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1 BACKGROUND

The Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (hereinafter referred to as the “Commission”) operates a global verification regime to monitor compliance with the Comprehensive Nuclear-Test-Ban Treaty (CTBT). It provides timely data, assessments and other products and services to Signatory States of the Treaty. More information can be found on the Commission's website: www.ctbto.org.

An On-Site Inspection (OSI) is the final verification measure to verify States’ compliance with the CTBT. The evolution of an OSI is dependent upon the implementation of the Inspection Team Functionality (ITF) concept, with particular questions being posed and answered through the application of inspection permitted techniques.

2 INTRODUCTION

In the context of Initial Over-Flight (IOF), the Commission operates a commercial-of-the-shelf (COTS) data acquisition system capable of capturing up to four geo-referenced video streams from airborne cameras, with integrated capability to narrate these recordings and save placemarks/markers. The configuration is used by OSI surrogate inspectors; hence the users or operators of the configuration are hereinafter referred to as “inspector/s”. The configuration consists of:

- A central recording unit (CRU);
- Four tablet computers with data acquisition software, one for each inspector;
- Video cameras and headsets connected to the tablet computers.

The CRU, installed in the airframe, receives GNSS signals from an antenna and broadcasts the position data stream via LAN to four inspector tablet computers. Each inspector tablet computer has an external video camera mounted on airframe windows, and a headset used for narrating the video.

On their tablet computer, an inspector watches the video stream from the camera and the airframe’s GNSS position on a map view. They may at any moment start an audio or a video recording; while recording is in progress, the inspector may also click a button to add a marker (originally called “waypoint”) – this takes a still photo and associates the timestamp/current location to it, while continuing recording audio/video. Once each recording is complete, the tablet computer uploads data via LAN to the CRU. The two primary use cases are:

- An inspector makes multiple short audio/video recordings as they encounter points of interest;
- An inspector continuously records audio/video as the airframe flies along a flight line, adding waypoints and voice narration to eventual observables. In this case, the dataset has fewer files, but they may be large (e.g., 30 km flight line @ 100 knots = 10 minutes of recording = ~1 GB).

In addition, an inspector may take a still photograph with a handheld camera. This is independent from the acquisition configuration described above. The handheld cameras:

- Do not have time synchronization nor GNSS receiver, but the camera time is manually synchronized with the CRU;
- Do not automatically upload still photographs to the CRU. However, the inspectors will later copy the photographs taken by these cameras and will use it in their report.

To enhance the review and processing of the airborne visual observation data acquired during an IOF with the configuration described above, the Commission seeks a Contractor to design and develop a custom software application for visualisation, processing, and classification of IOF data (hereinafter referred to as the “System”). These Terms of Reference (hereinafter referred to as the "Toor") define the technical framework for the procurement of services to develop the System.

3 SCOPE

The Contractor shall develop the System to run on the CRU or on a dedicated Windows 11 laptop, to which the acquired data will be available locally, and would allow for:

- Contextual visualisation of all recordings taken during the IOF;
- The processing and classification of data; and
- Synchronous playback of the recordings.

Note the CRU or dedicated Windows 11 laptop exist in an air-gapped environment i.e., do not have access to internet resources.

3.1 Visualisation of acquired data

The System shall implement the following usage scenarios:

1. The System shall import all IOF data at once and group them by inspector/camera based on the file naming convention. The camera orientation (mounted on the left/right side of the airframe or eventually pointing downwards) and default field of view (FOV) shall also be accounted for.
2. The System shall implement a timeline view allowing for temporal correlation of the recordings, for example to identify time intervals when several inspectors noted observables, or to review videos taken by the two inspectors from different viewing angles (e.g., L1 and L2 at the same time, or R1 on the first flight line and L1 on the second flight line).
3. The System shall implement a map view allowing for display footprints of all recordings and waypoints on the map, either simultaneously or with extensive filtering possibilities (i.e. filtering by camera, time interval, altitude, of custom region of interest (ROI) in the map).
4. The System shall display geotagged audio/video/photo files on the map and play them back. The System shall allow for browsing the waypoints taken along the recording, implementing

both fast scrolling and cutting out shorter clips (of a preset/configurable duration before and after each waypoint) out of the original recordings.

5. The System shall allow manual addition of markers/point of interest.

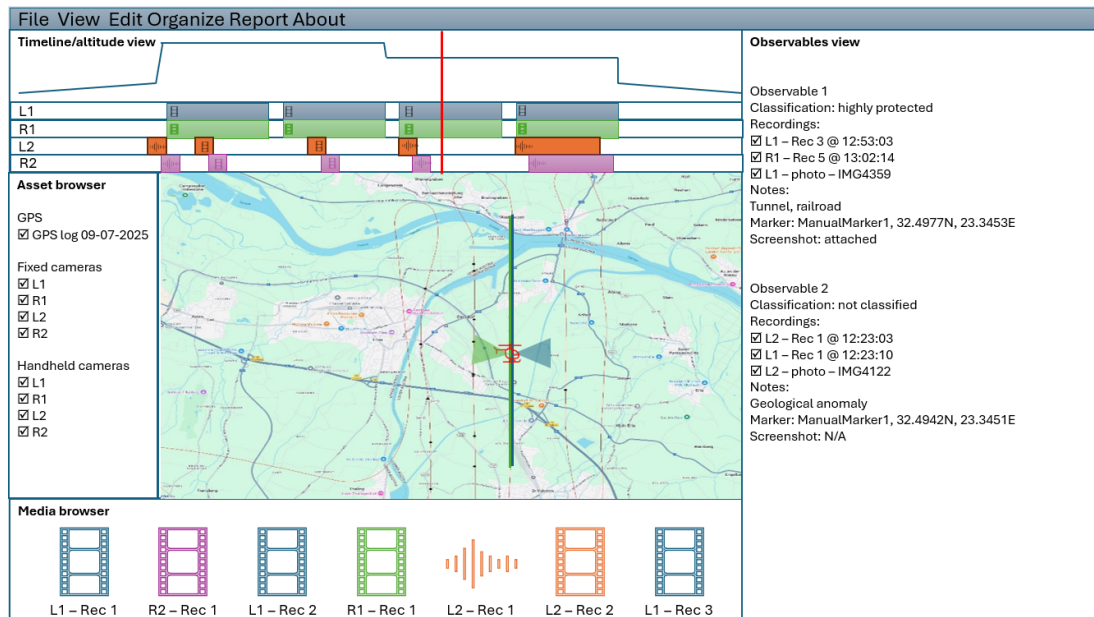


Figure 1 Mock-up of the IOF data visualisation, processing, and classification tool.

In addition, the System shall meet certain functional requirements:

6. The review and processing would happen on the CRU or on a laptop without Internet connection; the map view shall use offline maps (mbtiles or a map server in the LAN) and display some vector objects (polygon of the inspection area, flight plan lines and waypoints) from the local shape files.
7. The System shall allow for basic audio/video/photo editing, such as renaming, trimming beginning/end, and taking a shorter fragment out of a longer recording.
8. The System shall allow for supporting GPS tracks (in CSV and GPX formats), including visualisation, trimming, filtering by altitude, etc.
9. The System shall correctly synchronize the recordings using the time information in associated GPX files and meta data. The System shall also allow for batch correction of the timestamps; this will be particularly useful for the photos taken with handheld cameras which do not receive time synchronization from the CRU.

3.2 Organizing and classifying the processed data

The review and analysis of the input data shall result in a smaller and well-structured dataset that will be then exported to Geospatial Information Management system for OSIs (GIMO) for further use. The

System shall allow for creating custom data bundles, each one being a (zipped) folder containing information pertaining to one observable:

- Unique ID and a human-readable name.
- Set of short audio recordings, video fragments, and photos taken by one or several cameras of the data acquisition system and or handheld cameras. Each photo/video shall have a name, timestamp, a camera ID, and geolocation in its metadata.
- An optional text file with the inspector-entered note.
- An optional sketch image file that shows a map fragment, a flight line with icons where a recording was taken, a camera orientation/FOV, and an inspector-entered marker of the observable.

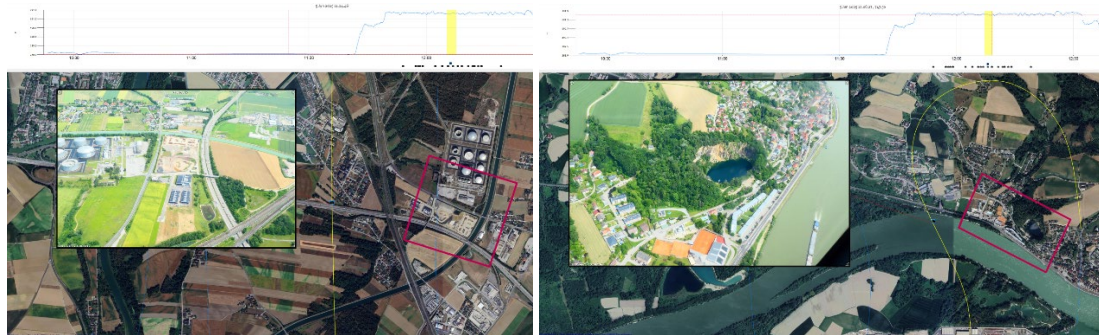


Figure 2 Sketches displaying a map fragment, a photo, its marker on the flight line, and an inspector-entered polygon of an observable.



Figure 3 Drawing of how a sketch could look like when the same observable is filmed with left/right-looking cameras as the airframe flights back along the next flight line.

Each bundle will be initially “non-classified”; following review the inspector will assign it with either an “OSI protected” or “OSI highly protected” tag. The System shall then export bundles into separate locations depending on their classification level.

3.3 Synchronous playback of the recordings

While being a secondary objective, the Commission aims to reuse the developed System (particularly, its capability to simultaneously manage multiple time-synchronized videos) for training purposes. The Commission owns a simulator setup with a helicopter body and four large displays next to its windows.

Optional requirement:

The Contractor, if capable, may propose and develop an additional software module allowing the replay of four (4) synchronous HD video streams on the external screen, together with the playback of associated flight parameters — including location on the map display, altitude, heading, and speed — on a fifth screen.

4 ORGANIZATION OF WORK

The Commission seeks to establish a Contract for a period of eighteen (18) months for the provision of development services following agile software development methodology. The work will be split into three (3) phases, each one organized into multiple development sprints with the duration of 3-4 weeks. Total work package will not exceed 130 person-days of work; the Commission does not guarantee any minimal order.

Tentative scope and schedule of each phase is outlined in 3.2 below; this breakdown is provided for a sole purpose of allowing the Contractor to assess the availability of resources and prepare cost estimates. Exact duration of each phase and scope of each sprint will be determined and mutually agreed between the Commission and the Contractor at the beginning of each phase (resp. sprint).

4.1 Initiating work

On Contract award, the Contractor shall:

1. Assign a project development and management team;
2. Submit paperwork to the Commission for Contract software developers to gain access to Commission:
 - Code repository and version control application (e.g., GitLab);
 - Task management tool (e.g., JIRA);
 - Document repository (e.g., Confluence).
3. Organize a kick-off meeting, either virtual or at the CTBTO TeST Centre in Seibersdorf, Austria, and the start of development no later than in one (1) month following the Contract award.

The Commission shall:

4. Put in place a code repository with version control (e.g., Gitlab), a task management tool (e.g., JIRA), and a document repository (e.g., Confluence).

4.2 Project phases

#	Duration	Scope
1	From Contract award to Q1 2026 (approx. 3 months)	The phase aims at creating a minimal viable prototype (MVP) implementing basic (as many as reasonable) functions allowing for import, visualisation, and processing of the IOF data. This MVP will be used during a field test organized by the Commission and tentatively scheduled for Q1 2026. For estimation purposes, the phase will use approximately 50 person-days of development and associated efforts.
2	Q2 2026 (approx. 3 months)	The phase aims at addressing the user feedback from the first field test, at implementing some advanced functions (e.g., more accurate display of the cameras' footprints on the map, better data classification), and, most importantly, at delivering a production-ready System to be used during the Integrated Field Exercise (IFE) organized by the Commission in September-November 2026. For estimation purposes, the phase will use approximately 60 person-days of development and associated efforts.
3	Q1 2027 (approx. 1 month)	The phase aims at addressing the user feedback from IFE2026, implementing any outstanding functions, and finalizing the System. For estimation purposes, the phase will use approximately 20 person-days of development and associated efforts.

4.3 Deliverables

The Contractor shall provide:

1. At the beginning of each phase, a Work Plan, including an estimate breakdown of person-days/hours and duration of the phase, and a phase plan in form of a version-controlled document in the Commission's Confluence document repository.
2. At the end of each phase, a phase report (in form of a version-controlled document in the Commission's Confluence document repository) and a stable System version (binary and/or installer in the Commission's Git code repository) that includes all the functions implemented during the phase.
3. At the beginning of each sprint, a sprint plan including an estimate (in person-days) and duration of the sprint, add duly filled tickets in the Commission's Jira task manager.

4. At the end of each sprint, a sprint report (e.g., in form of an automatic report generated by the Commission' Jira task manager), up-to-date source code in the Commission's Git repository, and up-to-date project documentation (including at least installation instruction, user manual, test report) in the Commission's Confluence document repository.

4.4 Acceptance protocol

At the beginning of each phase, the Commission and the Contractor shall jointly prepare the test protocol that the Commission will use for accepting the deliverables at the end of the phase. In general, the Commission expects that:

1. the Contractor shall deliver the System implementing all functions agreed for a particular sprint/phase;
2. the Contractor shall test the System against the acceptance test protocol, log all inconsistencies in the task manager, and provide a test report;
3. the Contractor shall regularly (at least weekly) update the task manager, document repository, and code repository throughout each sprint and phase;
4. the Contractor shall fix identified inconsistencies during the upcoming sprints at its own expense.

The Commission may ask the Contractor's lead developer (or another team member) to travel to the CTBTO TeST Centre in Seibersdorf, Austria for the conduct of any acceptance test.

5 REQUIREMENTS

5.1 Contractor requirements

The Contractor shall:

1. Be a company established for at least four (4) years.
2. Have a minimum of four (4) years of experience using a formal project management methodology and have a minimum of four (4) years of experience in providing software development services using an Agile methodology, preferably Scrum.
3. Have a minimum of three (3) years of experience developing or customizing GIS-like software systems allowing for a contextual visualization and processing of geo-localized/geo-tagged data. The Contractor shall provide references to at least two (2) such systems it has developed or substantially customized.

5.2 Staff of the Contractor

Staff assigned to the project shall:

4. Have a minimum of three (3) years of experience working with a modern issue tracking and ticket management systems, for example Jira; code repository, for example Git; and document repository, for example Confluence.
5. Have a minimum of three (3) years of experience (demonstrated in the CV)) with a modern technology stack allowing for developing and maintaining the System, and compatible with Windows 11.

5.3 Development requirements

6. The Contractor shall clearly specify the technology stack it intends to use during the project; subsequent deviations from this stack are only possible after the Commission's approval.
7. The Contractor shall seek for the Commission approval for any third-party or pre-existing invention (such as an algorithm, software library, etc.) that it intends to use while developing the System, specifying its licensing terms and technical implications on the System.
8. Although formal certification is not requested, the Contractor shall follow applicable industry standards and best practices in the software development and the quality assurance.

5.4 Project requirements

9. Provide documented evidence, in the form of a plan, that the Contractor will be able to adjust the working hours of its relevant staff (e.g., project manager and lead developers), assigned to a Software Team, to overlap at least two hours with the Commission's working hours (9 am to 5 pm CET), on the Commission's request.
10. Provide written assurance that all documentation, communication (written and oral), and code (comments, commits description, class/function/variable names) supplied to the Commission shall be in English and submitted in an electronic form.
11. The Contractor shall assign a maximum of two (2) software developers to the project, not including supplementary roles such as project manager, quality assurance engineer, UX/UI designer. The Contractor shall minimize changes to the development team assigned to the project. Should onboarding of new staff be required, it will be done at the Contractor's expense.
12. The Contractor shall assign a single point of contact for all technical communications with the Commission, and a single point of contact (same or different) for administrative and financial matters. The Contractor's point(s) of contact shall be proficient in written and oral English.

6 INTELLECTUAL PROPERTY RIGHTS

The Commission will be the owner of all the project deliverables (listed in 4.3) and associated intellectual property rights, except for the third-party and Contractor's pre-existing inventions explicitly listed and mutually agreed at the start of development.

The Contractor shall use the Commission's Git, Jira, and Confluence (for which the Commission will provide access to at the beginning of the project) for all deliverables, unless a different arrangement is mutually agreed between the Contractor and the Commission.

7 WARRANTY

The Contractor shall provide warranty for a period of two (2) years. Warranty shall include fixing any inconsistencies with the present ToR, that are discovered at any time before or during the warranty period.

8 RISK MANAGEMENT

The Contractor shall provide a thorough risk assessment plan at the project's commencement to identify potential risks that could impact the successful execution of the outlined implementation activities in this Terms of Reference (ToR). Risks may include but are not limited to technical challenges, changes in project requirements/scope, resource constraints, schedule delays, integration difficulties, and third-party software dependencies. The risk assessment plan should be continuously updated, aligning with the delivery of project milestones and significant accomplishments.

Upon the project's satisfactory completion, the Contractor is obligated to conduct a final review of the initially identified risks. Risks that have been effectively mitigated or did not materialize should be officially closed, accompanied by appropriate documentation. The insights gained from the risk management process should be methodically documented and shared with the CTBTO, thereby contributing to the knowledge repository for forthcoming software development endeavours.

9 TIMEFRAME REQUIREMENTS

Tentative schedule is provided in 4.2. While this schedule is subject to change, it is expected that the development starts no later than in one (1) month after the Contract award, the MVP is delivered before the field test in Q1 2026, and the production-ready system is delivered before the IFE 2026 (i.e., latest in Q2 2026). The Contractor shall not commence any work prior to receiving an authorised Work Order (WO) from the Commission.

ANNEX 1 to the TOR.

A sample dataset acquired by the system described above is provided to interested bidders; it comprises of:

1. A GPS track, in CSV format, 1 track point per second, including lat/long/alt, heading, and speed; the track is continuous from the start of the CRU till its shutdown.
2. Separate folders for each inspector tablet, labelled L1/L2/R1/R2, to differentiate between inspectors sitting on the left/right side of an airframe in the 1st and 2nd row.
3. Audio recordings, in .MP3 format; a GPX file matching each recording is available (to be used for geo-referencing and for time synchronization).
4. Video recordings, in .MP4/MPEG format; a GPX file matching each recording is available (to be used for geo-referencing and for time synchronization).
5. If waypoints were added for a recording (audio or video), a separate folder with the name of the recording is created and photos (corresponding to the waypoint, with GPS coordinates in their EXIF metadata) are store inside.

Note: default names of the inspector folders (L1, L2, R1, R2) can be changed if needed; naming template of the audio/video recordings (e.g., L1_Recording_#) can be configured too.